CLOUD INDUSTRY FORUM

The transformational impact of cloud





Executive summary

After two years of upheaval and uncertainty, businesses are finally looking to the future with a sense of greater positivity. While the pandemic's impact will continue to be felt in many areas for the foreseeable future, the success of global vaccination programmes and the emergence of effective new Covid treatments mean the worst appears to be behind us.

Business leaders, therefore, are now thinking about what's next. We've implemented remote working and made it a success, so much so that many organisations have chosen to keep it in some form permanently. We've truly recognised the value of tech, by embracing new digital capabilities while maximising existing ones. We've rolled with the punches and, despite everything the last couple of years have thrown at us, we've come out the other side.

With our eyes now firmly on recovery and growth, now is an ideal time for businesses to take stock of their technology capabilities and make meaningful plans for the future. Cloud adoption is a crucial area that leaders should address at this point: have organisations progressed positively over the last couple of years, or have they stagnated or even regressed?

This paper aims to answer the above questions. The major achievements of the last two years should be lauded, but we should also examine what hurdles remain when it comes to making the very most of cloud. The technology is firmly in the mainstream now, but issues such as legacy integration, skills shortages, lack of budget and security concerns are still prominent.

2021 was a difficult year to make plans, but 2022 promises greater stability and a better environment to really push your organisation forward. We can never be sure what disruptive event is just around the corner, but armed with the data and insights from our research, you can build a strategy that ensures you'll be prepared for whatever the world throws at you next.

David Terrar - Chair - Cloud Industry Forum

Contents Methodology and definitions 1 A new dawn for cloud? 6 2 On the road, but far from journey's end 11 3 A clearer future is forecast 16 Conclusion 24

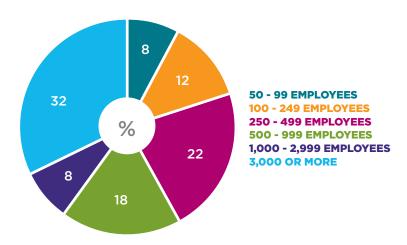


Methodology and definitions

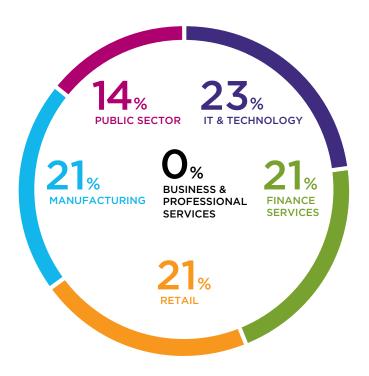
Methodology and sampling

Between late 2021 and early 2022, Vanson Bourne conducted a major research project on behalf of the Cloud Industry Forum, designed to assess the state of play regarding cloud adoption, how organisations have coped with the challenges of the last couple of years, and what needs to be done to address any lingering issues. The survey polled 250 senior IT and business decision-makers in large enterprises, small to medium-sized businesses (SMEs) and public sector organisations. All of those represented have UK operations.

How many employees does your organisation have globally?



Within which sector does your organisation operate?



three





As the sophistication and scope of cloud computing has grown, its definition has evolved to cover many different things. It might be used to describe hosted IT services or outsourcing of any type, or it can be defined as something more specific, such as data storage or application management. However, for the purposes of this report, we have stuck with the tried-and-trusted definition of cloud put forward by the National Institute of Standards and Technology (NIST):

Cloud computing is a term that relates to the IT infrastructure and environment required to develop/host/run IT services and applications on demand, with consumption-based pricing, as a resilient service.

Communicating over the internet and requiring little or no client end components, it provides resources and services to store data and run applications, from many devices, anytime, anywhere, as-a-service. The services can, in turn, be scaled up and down as needed to meet a customer's variable operational needs, ensuring maximum cost efficiency.



Digital transformation is the process of combining IT modernisation, an agile approach, and new ways of working and thinking using digital, social, mobile and emerging technologies. It necessitates a top-down digital culture, the encouragement of innovation and new business models, and an increased use of digital technology to improve the experience of your organisation's employees, customers, suppliers, partners and stakeholders.



Summary of key findings

Cloud remains integral to the ongoing transformation of businesses:

- 93% of respondents said that cloud is important to their company's digital transformation strategy, with 72% considering it either very important or critical
- Cloud's benefits are numerous, with respondents citing greater business agility (52%), improved scalability (48%) and better business resilience (45%) as their top three advantages
- 96% said cloud has saved their organisation money, while 61% consider the business more secure thanks to cloud technology
- With the global outlook now looking more stable, leaders now have more time to focus on overcoming the remaining hurdles to cloud adoption

Key barriers to cloud implementation remain:

- Lack of budget is the main challenge (cited by 44%), followed by insufficient manpower and resources (41%)
- Skills shortages were close behind (35%), alongside integration issues with existing legacy technology (also 35%)
- While 41% of businesses reported that its easier to source OPEX budget, a similar proportion (37%) said the same in relation to CAPEX budgeting, suggesting companies are struggling to move on from CAPEX models
- Security is at the top of the agenda as a key area of focus for the next
 12 months (mentioned by 58%), although it is less of an inhibitor of cloud adoption than in previous years
- While many companies want to look at new technology opportunities, they are still focused on the fundamentals such as infrastructure

When choosing cloud providers, cost remains king:

- 84% say ESG-S (Environmental, Social and Governance and Sustainability)
 credentials are important factors in the cloud procurement process, underlining environmental concerns of leaders
- However, when considered alongside other factors, ESG and sustainability rank much lower, cited by just 25% of respondents
- Cost is the most widely mentioned consideration (53%), followed by the number of services available (51%), trust (50%), ability to scale (34%) and the speed of response of a chosen cloud managed service provider (26%)





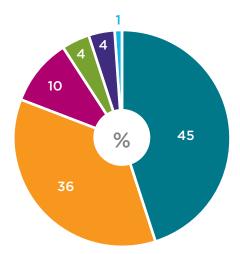


A new dawn for cloud?

Digital transformation: the state of play

A good place to start is to examine where organisations are in their digital transformation journeys, particularly how their plans have been impacted in the last two years.

Does your organisation have a digital transformation strategy?



IT IS ALREADY IN PLACE

DON'T KNOW

implementation plans forward accordingly. Overall, 75% of respondents accelerated their efforts

in the last two years, whether they already had plans in place or not.

WE HAD PLANS TO IMPLEMENT ONE BUT HAD TO RAPIDLY ESCALATE OVER THE PAST TWO YEARS

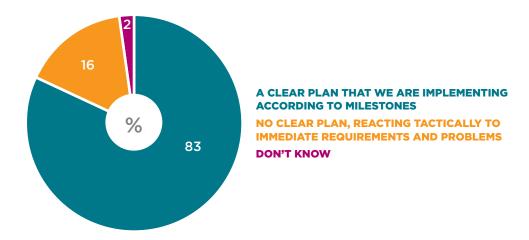
WE DID NOT HAVE ONE OR PLAN TO, BUT HAVE DEVELOPED ONE OVER THE PAST TWO YEARS
WE DID NOT HAVE ONE OR PLAN TO, BUT ARE NOW DEVELOPING ONE FOR THE NEXT 3-6 MONTHS
WE DO NOT HAVE ONE OR PLAN TO

The above charts demonstrate how digital transformation strategies are now fully mainstream and firmly established in the minds of business leaders. Almost half (45%) already have a strategy in place, while 36% adapted to the demands of the pandemic and brought their

Almost half (45%) already have a 15 strategy in place, while 36% adapted to the demands of the pandemic and brought their implementation plans forward accordingly.



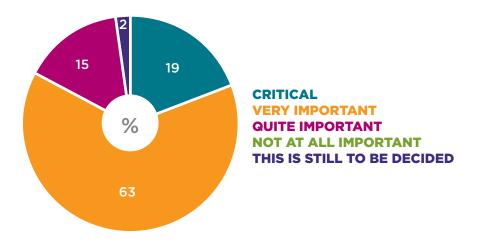
Which of the following is closer to your organisation's position with its digital transformation strategy plan?



Looking to the future, a large majority (83%) have a clear idea of how their strategy will develop, which underlines the greater sense of stability permeating businesses as we emerge from the pandemic.

A total of 98% of respondents said that cloud is important to their company's digital transformation strategy, with 82% considering it either very important or critical.

To what extent is cloud important to your organisation's digital transformation strategy?

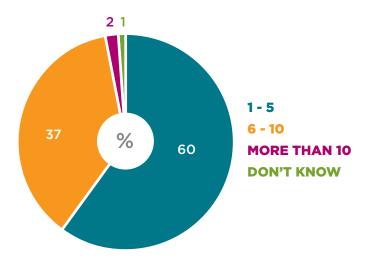


A total of 98% of respondents said that cloud is important to their company's digital transformation strategy, with 82% considering it either very important or critical. This illustrates how cloud has remained a constant throughout the last couple of years in terms of its reliability in supporting technological development, despite unprecedented financial and organisational disruption.



Cloud continues to make the difference

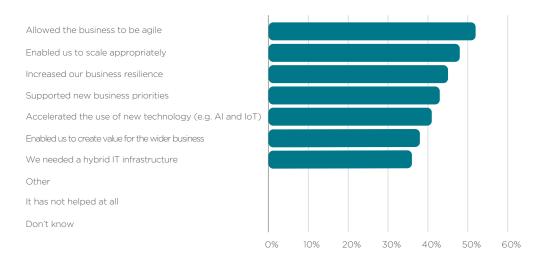
How many cloud services does your organisation currently have in place?



Respondents cited greater business agility (52%), improved scalability (48%) and better business resilience (45%) as their top three advantages of cloud.

On average, businesses currently have five cloud services in place, while 39% have gone a step further by adopting more than six.

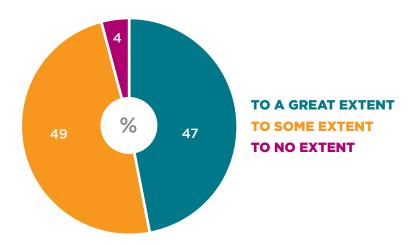
How has the use of cloud helped your organisation?



Cloud's benefits are numerous, as evidenced by the above graphic. Respondents cited greater business agility (52%), improved scalability (48%) and better business resilience (45%) as their top three advantages. Others, such as accelerating the adoption of new technology like AI, also figure prominently.



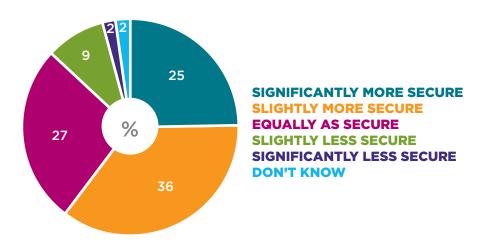
To what extent have the cloud-based services that your organisation uses saved your money?



96% of those surveyed said cloud has saved the organisation money – a major milestone.

For the first decade of cloud computing, we have steered businesses away from the expectation of cloud saving them money (in favour of the previously stated advantages). Cost savings are always a priority when it comes to evaluating the impact of new tech. Cloud-based services have now really proven their worth in this respect too, with 96% of those surveyed saying they have saved the organisation money – a major milestone.

Do you feel your organisation is/would be more or less secure if it is/were using cloud services?



Building a secure organisation is a key concern for leaders both inside and outside the IT department, particularly given the explosion in ransomware attacks in 2021. Again, the majority of respondents (61%) believe that cloud has had a positive impact in this respect, with 25% saying the business is significantly more secure. Despite this, there remains a sizeable minority (27%) that think cloud has no bearing on security, suggesting that more can be done by cloud providers to promote this benefit.

 $^{^{1}\,}https://www.computerweekly.com/news/252504676/Ransomware-attacks-increase-dramatically-during-2021$



To what extent do you agree or disagree with the following statements?

Moving to the cloud has simplified the challenges the IT department in my organisation faces

My organisation struggles to keep up with new cloud technology

A multi-cloud environment is now crucial for my organisation to operate efficiently

Cloud technology has introduced more complexity to my organisation

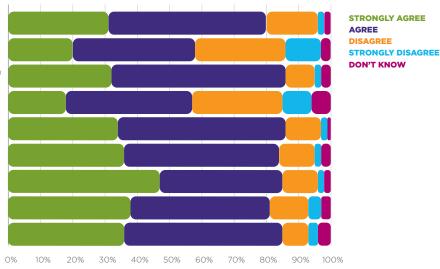
We have a greater number of IT projects in flight than we did three years ago $\,$

Cloud is the key enabler for my organisation in the future

The mass shift to remote working means that the cloud is more important than ever

The cloud has been critical to helping us manage during the pandemic

My organisation believes that cloud is the key for digital transformation



Digging more deeply into the impact cloud has had on businesses, 80% agreed that cloud migration has simplified the challenges faced by the IT department, which is a powerful endorsement of its ability to make a real difference. In a similar vein, 81% agreed that cloud has been critical in helping their company manage during the pandemic, while 83% consider it a key enabler for the future.

On the flip side, the above chart also reveals some of the cloud-related challenges that respondents still face. For example, 58% agreed that their business struggles to keep up with new cloud technology, while 57% said cloud has introduced more complexity to the organisation. It is clear that there remains room for improvement in terms of fully maximising cloud's potential, especially considering the importance of multicloud and effective long-term remote working.

There remains room for improvement in terms of fully maximising cloud's potential, especially considering the importance of multicloud and effective long-term remote working.

SUMMARY

For all the challenges posed by the pandemic, the progress of digital transformation has been a key enabler for businesses to adapt. Leaders remain committed to enhancing their technological capabilities, with cloud playing a leading role in helping them achieve this aim.

While organisations are reaping many of the rewards of cloud, there remain a number of hurdles to be addressed if businesses are to truly make the most of it. The good news is that businesses should now have greater opportunity to focus on these goals as the global outlook becomes more stable. Cloud providers should take note, as they have a great opportunity to assist these companies in their ongoing journeys.





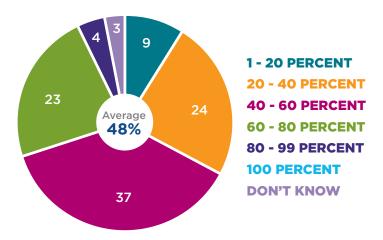


On the road, but far from journey's end

Signs of stagnation?

Having examined where cloud features in overall digital transformation strategies, it's now important to explore where organisations are in terms of cloud adoption in a little more detail. This will help us identify the limitations that are disrupting cloud journeys.

What proportion of your organisation's IT infrastructure is hosted in the cloud?

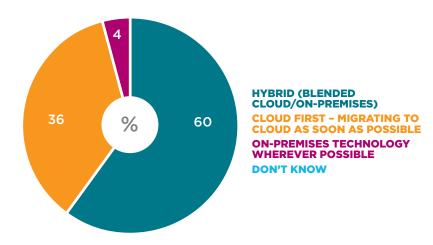


While cloud take-up has generally been on an upward trajectory for many years, there are clear signs that hybrid IT is the direction of travel for most organisations. The average proportion of IT infrastructure located in cloud is now 48%, which is actually a decline from 50% in 2020. While only a small reduction, it suggests that barriers to further adoption remain, possibly exacerbated by the pandemic.

While cloud take-up has generally been on an upward trajectory for many years, there are clear signs that hybrid IT is the direction of travel for most organisations.



What is your organisation's current cloud technology approach?



60% of organisations reporting a preference for a blend of cloud and on-premises infrastructure.

The above highlights the prevalence of hybrid arrangements, with 60% of organisations reporting a preference for a blend of cloud and on-premises infrastructure. Cloud-first has a strong foothold on 36%, although it remains some distance behind hybrid.

Reasons for challenges

What is preventing your organisation from fully advancing the use of technology across the business?

We are worried the new technology won't integrate with legacy technology

We do not have the budget

We have too many security concerns

We do not have the skills in-house

We do not have the right culture to adopt new technology

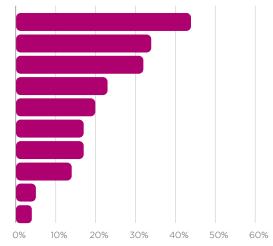
We do not have appropriate help from partners

We do not have the executive support

There is no appetite for advancing or changing our technology

Other

Don't know

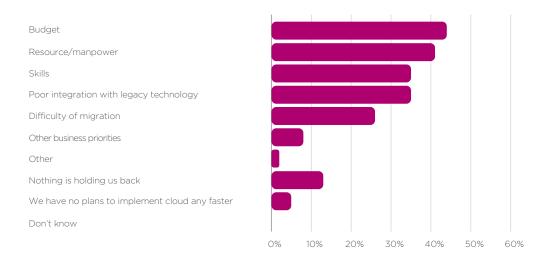


The factors putting the brakes on further technology adoption are often complex and multifaceted, depending on the different challenges facing individual businesses and industries.

The biggest problem on the minds of leaders relates to worries around legacy integration, cited by 44%. The perennial challenge of budget constraints is second on 34%, closely followed by security concerns on 32%.



What is holding your organisation back when it comes to faster cloud implementation?

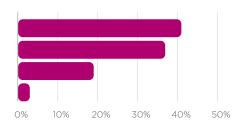


Looking at cloud more specifically, budget issues are the most commonly cited hurdle to greater implementation, mentioned by 44% of respondents. This is followed closely by a lack of manpower and resources on 41%.

Skills shortages and an inability to successfully integrate cloud with existing legacy technology are also key barriers to faster implementation, each cited by 35% of those surveyed. In smaller businesses, the skills shortage is especially pronounced, with 58% of leaders at businesses with 50-99 employees mentioning this as a factor, compared to just 29% at organisations of 3,000 or more employees.

When it comes to cloud spend within your organisation, do you find it easier to source OPEX or CAPEX budget?

It is easier to source OPEX budget
It is easier to source CAPEX budget
We don't have any trouble sourcing either
Don't know



Budget issues are the most commonly cited hurdle to greater cloud implementation, mentioned by 44% of respondents. This is followed closely by a lack of manpower and resources on 41%.

Another issue that is currently stalling cloud migration is a struggle to move away from CAPEX budgeting. While 41% of businesses reported that it is easier to source OPEX budget, a similar proportion (37%) said the same in relation to CAPEX budgeting. This figure is even higher in the financial services and IT and technology sectors, at 49% and 47% respectively. Clearly there remains an appetite for maintaining infrastructure close to home, so it is up to cloud providers and experts to further convince leaders of the merits of OPEX approaches.

© Cloud Forum IP Ltd 2022 thirteen



Failures in flight

Why, if at all, have cloud migration projects failed in your organisation?

Legacy technology wasn't compatible

Resource/manpower

Budget - it got too expensive

We didn't test it thoroughly enough

We scaled up too quickly

Lack of planning

Our IT partner let us down

We chose the wrong cloud platform

We didn't plan enough time

Other

Cloud migration projects haven't failed in my organisation

Don't know

It is encouraging to see that for the first time in 12 years of Cloud Industry Forum reports, security is no longer the biggest inhibitor of cloud adoption.

While 28% of organisations report that their cloud migration projects have been successful, it's the failed projects we should focus on if we are to work out how to make things easier for businesses. Again, the issue of legacy compatibility crops up (25%), as do skills and resource shortages (25%). Other factors, such as a lack of adequate testing and scaling up too quickly, point towards a gap in expertise or support that could be filled by the right cloud provider.

One eye on the future

What are your department's top three challenges over the coming 12 months? Combination of responses ranked first, second and third

IT Security

Lack of budget

Lack of IT skills

Finding the right IT partner

Lack of a clear strategy

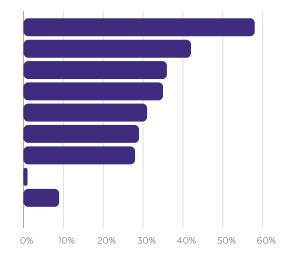
Lack of culture for a digital first approach

Executive support

Other

We don't have any challenges in our department

Don't know



30%

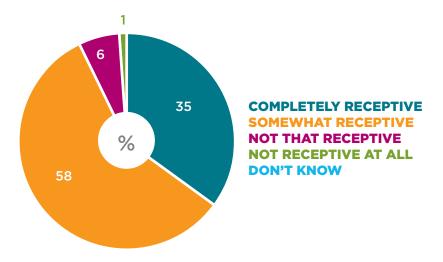
40%

50%

Interestingly, when looking at the immediate future, security rises to the top of the agenda as a key challenge (mentioned by 58%). As has been widely reported, cybersecurity must remain a major area of focus, however it is encouraging to see that for the first time in 12 years of Cloud Industry Forum reports, security is no longer the biggest inhibitor of cloud adoption.



How receptive is your organisation to new technology options that will support your business?



While organisations are receptive to new technologies as a whole, the above chart suggests that some reluctance remains. At 58%, the majority of businesses report that they are 'somewhat receptive' to new technology as opposed to 35% of decision-makers who stated that their company is completely receptive. The last two years may have familiarised employees with a much wider range of tech, but this doesn't mean that they will accept all new technologies in future without question.

The last two years may have familiarised employees with a much wider range of tech, but this doesn't mean that they will accept all new technologies in future without question.

SUMMARY

Cloud is firmly embedded within organisations' digital transformation strategies, but there remain a number of challenges for decision-makers to address. Legacy integration, skills shortages and lack of budget sit high up in the list of challenges, although it is positive to see security concerns becoming less significant a barrier to progress. Cloud service providers have an important part to play in helping businesses clear these hurdles and make their cloud adoption strategies successful.





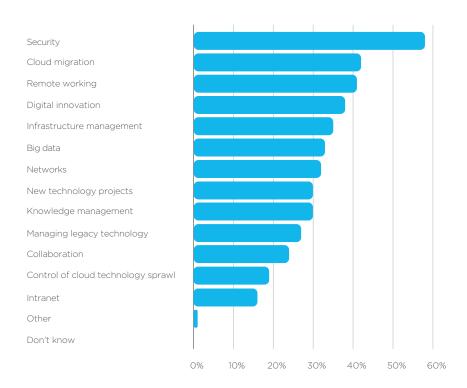


A clearer future is forecast

We now know a little more about where companies are on their cloud journeys as we emerge from the pandemic. With a more optimistic outlook ahead of us, we should now consider how things may pan out in the future.

Tech priorities

Which of the below are your organisation's most important IT projects?



With the general population now largely adapted to an increasingly online working life, businesses are now prioritising cybersecurity projects.

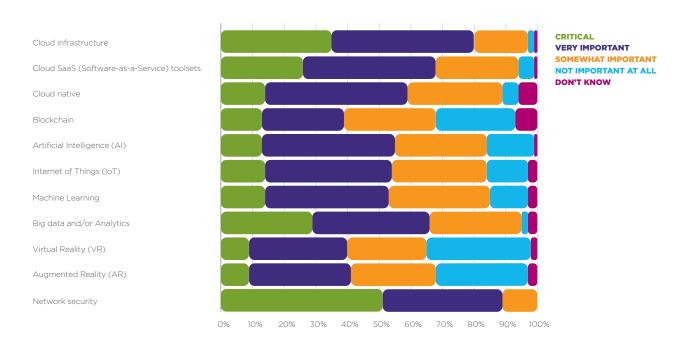
With the general population now largely adapted to an increasingly online working life, it seems logical that businesses are prioritising cybersecurity projects, with 58% ranking it high on their list.

Cloud migration ranks second at 42%, a figure that has increased from just 24% in 2020. This is an encouraging sign that cloud remains front of mind for decision-makers as we enter a period of greater stability.

While remote working has shown a decline from 47% in 2020 to 41% in 2022, it remains in the top three priorities for businesses. This reduction may be due in part to an increased desire to get employees back to the office to help rebuild camaraderie and team spirit, while maintaining remote working as part of a hybrid strategy.

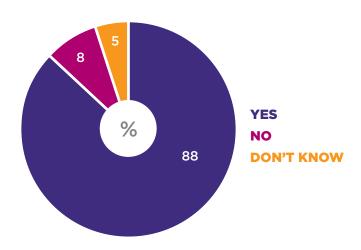


How important will the following technologies be to your organisation in the next five years?



In line with the previous chart, the above shows that 89% of respondents consider network security either very important or critical to their organisation in the next five years. This is followed by cloud infrastructure (80%) and cloud SaaS (68%).

Do you expect your organisation's adoption of cloud services to increase over the next 12 months?



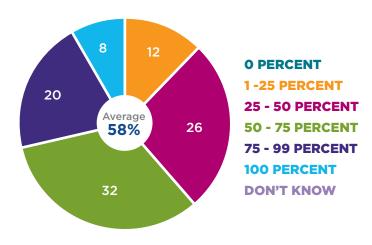
The future for cloud continues to look promising: 88% of respondents expect their adoption of cloud services to increase in the next 12 months.

The future for cloud continues to look promising. This is exemplified by the fact that 88% of respondents expect their adoption of cloud services to increase in the next 12 months. The results are reflective of an industry-wide embrace of cloud's capabilities, with the vast majority of businesses committed to continuing their cloud projects in some way.



Remote working

Approximately what percentage of your organisation is now able to remotely work?



An average of 58% of staff are now able to work remotely, with 51% of leaders saying they will continue to offer hybrid working in the future.

Across industries, an average of 58% of staff are now able to work remotely, which underlines its established status as a working method for many employees. As might be expected, lower percentages of employees across retail (51%) and manufacturing (48%) are able to work from home, while it is more prevalent in the public sector (72%).

Is remote working a part of your organisation's strategy moving forwards?



Moving forward, business leaders are set to maintain a consistent commitment to remote working, with 51% of those surveyed saying that they will continue to offer hybrid working in the future. Combined with the 39% who have always had a remote working strategy, this makes for 90% of respondents. Only a small proportion (9%) want employees back in the office as soon as possible, but as mentioned earlier, this does indicate that there is some desire to bring teams back together in person too.



Have you implemented any new IT security measures for your organisation's employees who were asked to work remotely?

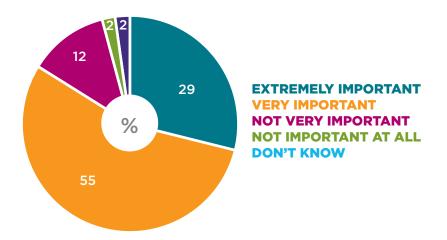


For businesses to make a long-term success of remote working, security issues must be overcome. 54% of businesses report that their employees are now as secure when working remotely as they are when in the office, which is up from just 40% in 2020. Significant strides have clearly been made in this area.

Despite this progress, 35% of businesses also asserted that their employees were still more vulnerable at home than in the office. This shows that there is still more to be done before remote working can confidently be considered as secure as the office.

ESG (Environmental, Social, Governance) and sustainability

How important is environmental, social and governance (ESG) and sustainability to your organisation when deciding on which cloud vendors to use?



84% said ESG and sustainability credentials are either very important or extremely important factors in the cloud procurement process.

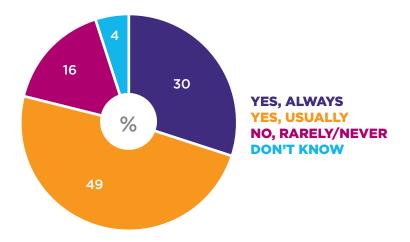
Cloud migration is a viable way of making businesses greener. In fact, research from Accenture suggests that migrating to cloud can reduce global carbon emissions by almost 60 million tons of CO2 per year.²

The attitudes of decision-makers would appear to reflect this, with 84% saying ESG and sustainability credentials are either very important or extremely important factors in the cloud procurement process.

 $^{^2\} https://newsroom.accenture.com/news/cloud-migrations-can-reduce-co2-emissions-by-nearly-60-million-tons-a-year-according-to-new-research-from-accenture.htm$



Would you reject a prospective cloud vendor if they gave a poor, or no response about their ESG and sustainability strategy?

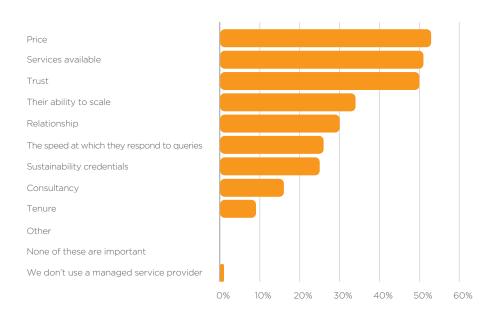


49% said that they would usually reject a prospective cloud vendor if they had unconvincing ESG and sustainability policies in place.

In a similar vein, 49% said that they'd usually reject a prospective cloud vendor if they had unconvincing ESG and sustainability policies in place. Further to this, 30% said that they'd always reject a vendor for the same reasons.

Taken in isolation, it would seem that ESG and sustainability are leading criteria when it comes to choosing a cloud provider. However, digging deeper into the data suggests this may not always be the case.

Which of following priorities are most important for your organisation when thinking about working with a cloud managed service supplier? Combination of responses ranked first, second and third



twenty



According to the above, ESG and sustainability still aren't prioritised over cost (53%), nor are they considered more important than factors like trust (50%), ability to scale (34%) or even the speed of response of a chosen cloud managed service provider (26%). At just 25%, sustainability credentials actually sit seventh on the list of priorities, which suggests that a passion for ESG doesn't always translate into practice.

SUMMARY

Organisations have plenty to think about for the immediate and long-term future, but they have come a long way in the last two years. Security remains a priority, but it is no longer hindering innovation in a way that it may have done before. There are improvements to be made to ensure remote workers are as secure as office-based staff, but cloud offers lot of potential helping businesses move towards their digital goals.

Cloud providers that make strides to embrace clear ESG and sustainability strategies will benefit, but while businesses view this as important, it is clearly not at the expense of preferential pricing, a high quality of service and extensive technical capabilities, which remain most customers' purchasing priorities.

ESG and sustainability still aren't prioritised over cost, or other factors such as trust, scalability or speed of response of a cloud provider.



Conclusion

The last couple of years have been an extraordinary technology journey. So many businesses have accelerated and embraced digital technology as a means of ensuring they can endure a period of incredible uncertainty. Cloud has proven its worth once again, playing a pivotal role in keeping businesses functioning, simplifying IT, and making the business more agile and resilient in general.

It will be fascinating to see where things go next, especially with the promise of economic recovery as the UK and the rest of the world bounce back from the pandemic. Perhaps leaders will now have more time to focus on the tasks that were put on the backburner in 2020 and 2021, such as the bigger IT projects that will really transform the business in the long term.

Those that correctly predict and prepare for the future ahead of us are the ones that will stand out. This means getting to grips with the tech challenges that we still face and using cloud to add extra resource and security to a busy and rapidly evolving IT estate. At the Cloud Industry Forum, we call upon business leaders, IT suppliers and elected officials to ensure they are doing everything feasible to train and develop our digital workforce for the next decade so we can continue to innovate. There are countless opportunities for rapid growth and prosperity, so the time to grasp them is now.

What will cloud's status be this time next year? Only time will tell for sure, but the future finally looks bright.

Alex Hilton - CEO - Cloud Industry Forum

© Cloud Forum IP Ltd 2022 twenty four



Cloud Industry Forum executive team



Alex Hilton - CEO

alex@cloudindustryforum.org



@alexhilton_gb



David Terrar - Chairman



david.terrar@cloudindustryforum.org



twenty five

CLOUD INDUSTRY FORUM

About

The Cloud Industry Forum (CIF) is a not-for-profit membership driven trade body established in 2009 as a direct response to the evolving supply models for the delivery of cloud based software and IT services.

The Cloud Industry Forum advocates the use of online cloud services and as the market continues to mature, CIF continues to represent the digital community by bringing both cloud and business leaders together to educate and shape the world of Digital Transformation.



The Cloud Industry Forum PO Box 4160, Reading, RG8 6DT

e info@cloudindustryforum.org

(a) @UK_CIF www.cloudindustryforum.org